



UNIVERSITY OF HAWAII

David McClain
Interim President

December 19, 2005

Ms. Marion M. Higa
State Auditor
465 S. King Street, Room 500
Honolulu, Hawaii 97813-2917

Dear Ms. Higa:

Thank you for this opportunity to provide the attached comments on the draft report: *Follow-up Audit of the Management of the Mauna Kea Science Reserve*, received on December 14.

As indicated by your office at the outset of this project, the Follow-up Audit primarily focuses on the efforts made by the University and the state Department of Land and Natural Resources (DLNR) to implement the recommendations made in Auditor's Report No. 98-6 during the period FY1998-99 to the present.

The issues surrounding the management of Mauna Kea are complex, and I commend your staff for doing a remarkable job of assessing the multitude of issues and points of view in a short period of time. I trust that your research staff found University personnel to be open and cooperative throughout the audit process.

Again, thank you for the opportunity to comment. If you have any further questions, please contact:

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Sincerely,

A handwritten signature in cursive script that reads "David McClain".
David McClain
Interim President

Attachment

c: Board of Regents

Response from the University of Hawai'i to the State Legislative Auditor

Regarding

Follow-up Audit of the Management of the Mauna Kea Science Reserve

General Comments

- The University appreciates the Auditor's fairness and objectivity in recognizing the progress made by the University in its management of Mauna Kea, as well as the University's success in implementing many of the key recommendations made in the Auditor's 1998 report.
- The University agrees with the Auditor's assessment that more needs to be done to protect Mauna Kea's unique and precious resources – in particular, Auditor's recommendation 1.a., which references the need for the University, through its Office of Mauna Kea Management and the Mauna Kea Management Board, to be granted rule-making authority by the Legislature so they may implement and enforce appropriate management measures on behalf of the University. The University recognizes this responsibility, but was unsuccessful in gaining rule-making authority from the Legislature in the 2005 session. The University will continue its efforts to address this need at the next Legislative session.
- Aside from actions that require rule-making authority, the University has initiated important programs that are needed to develop conservation plans, such as wēkiu bug studies and completing an archaeological inventory of the Science Reserve.
- The University has earnestly strived to refine its roles and responsibilities in cooperation with its community-based partners – the Mauna Kea Management Board (MKMB) and Kahu Kū Mauna – in implementing the Master Plan. The management effort defined by the Master Plan relies on a unique, collaborative effort between the University, DLNR and the community. There is no simple blueprint, nor are there easy answers. Rather, each step of the implementation process requires a constant review of the Master Plan and refinement of the respective roles and responsibilities of OMKM, MKMB and Kahu Kū Mauna.

Requested Changes, Points of Clarification

The University asks that the Auditor consider the following changes to the current draft for the sake of clarification:

- **Page 1, Par. 2, 2nd sentence:**
We suggest changing "its" to "the University's" to make it clear that University is the lessee, as is correctly noted on Page 2

"At the time, the University of Hawai'i Institute for Astronomy was the steward of the Mauna Kea Science Reserve under it's (the University's) lease with the Department of Land and Natural Resources;"

- **Page 15, Par. 3, 2nd sentence:**

Change “antennas” to “auxiliary light collectors” and “radio waves” to “light” The changes are to correct technical inaccuracies.

“By this definition, ~~antennas~~ (auxiliary light collectors) such as those proposed for the Keck outriggers project, are not “telescopes,” since they only collect ~~radio waves~~ (light) and cannot provide astronomy observations.”

- **Page 23, Par. 2, following 2nd sentence:**

Add a statement clarifying that problems were corrected.

“The University and the observatories took corrective action and resolved all of the violations.”

- **Page 13, Par. 2, 3rd sentence; Page 23, Par. 3, 1st sentence; Page 33, recommendation 1. d.:**

Remove the word “further.” The use of the word “further” implies there was damage resulting from items cited as non-compliant with the associated conservation district use permits. Vigilant monitoring is important, of course. However, in this context, the infractions cited – such as the late removal of temporary structures – were minor and did not result in any damage to the summit.

“Such issues, if left unaddressed, increase the likelihood of ~~further~~ harm to the science reserve’s vulnerable environment.” (Page 13, Par. 2, 3rd sentence)

Without vigilant monitoring of it observatory tenants for compliance with conservation district use permits, the university risks ~~further~~ damage to the summit,...” (Page 23, Par. 3, 1st sentence)

“implement and enforce a permit and sublease monitoring system for astronomy precinct observatories to promote responsible stewardship and prevent ~~further~~ damage to the environment.” (Page 33, recommendation 1.d.)

Responses to Auditor’s Recommendations

The University of Hawai’i should:

1.a. obtain the authority to promulgate administrative rules for the Mauna Kea Science Reserve to authorize the Office of Mauna Kea Management to protect cultural and natural resources;

The University strongly agrees with the Auditor’s conclusion that the OMKM and MKMB needs to be granted rule-making authority by the Legislature in order to more completely fulfill its obligations in managing the Mauna Kea Science Reserve. Furthermore, the University submits that the lack of this rule-making and enforcement authority undermines the University’s ability to act on several key issues, including

managing public access, protecting cultural and natural resources, signage, and defining roles and responsibilities relative to other departments and agencies:

"However, critical management issues, such as the lack of administrative rule-making and enforcement authority, unresolved public access control, weak permit monitoring, and indeterminate management plans, continue to hamper the university's efforts to protect Mauna Kea's resources." – Auditor's Report

As stated at the outset of this report, the University has submitted legislation for rule-making authority and will continue to do so until the matter is addressed.

1.b. revise and update planning documents, including the master plan and leases and subleases, that will clearly assign roles and responsibilities for managing Mauna Kea and reflect stewardship matters resolved with the Department of Land and Natural Resources;

The Auditors' report states that the University has added to the complex web of responsibility "by tolerating different management documents without resolving inconsistencies between them or consolidating them into one comprehensive management plan." The report mentions the 1995 BLNR-approved management plan (1995 BLNR Management Plan) and the management plan contained in the 2000 Master Plan (MP Management Plan).

There needs to be a clear understanding that the Master Plan, including the Chapter X, Management Plan, is a planning policy guide. Specifically, the MP Management Plan proposes several policies and strategies "to integrate and balance the natural, cultural, educational, research and recreational values of Mauna Kea within a framework that provides responsible stewardship of the resources." (2000 Master Plan, page X-9)

The 1995 BLNR-approved Management Plan contains specific language relating, for example, to recreational and educational activities, hours of operation, prohibited uses, alcohol use, and commercial activities.

One of the goals the University is currently working on is the development of an integrated cultural and natural resources management plan that is guided by the policies, strategies and objectives of the 2000 Master Plan (see comments to 1.c.). Such a plan, however, is meaningless without corresponding enforceable administrative rules. Together, the integrated plan and rules will clearly assign roles and responsibilities for managing Mauna Kea.

1.c. develop, implement and monitor a comprehensive management plan for natural, cultural and historic resources of the summit and Hale Pohaku area; and MKMB's environment committee is in the process of developing a framework for a natural resources management plan. An archaeology monitoring plan is being developed in conjunction with a project to inventory the Science Reserve. The natural resources and archaeology monitoring plans will be combined into an integrated management plan.

1.d. implement and enforce a permit and sublease monitoring system for astronomy precinct observatories to promote responsible stewardship and prevent further damage to the environment.

The Auditor points out that Mauna Kea rangers diligently patrol the summit and inspect individual observatories for trash and equipment, as well as monitor observatory activities. To further maximize the effectiveness of the rangers, OMKM will provide rangers with copies of all current Conservation District Use Permits and corresponding checklists. The latter will be used by rangers during their periodic inspections of the observatory properties.

Additional Comments

Ranger Program

In addition to the services cited in the Auditor's report, Mauna Kea rangers have also proven their value by:

- Monitoring neighboring DLNR forest reserve and Natural Area Reserve (NAR) lands;
- Preventing forest fires;
- Rescuing lost and distressed hikers in DLNR forest reserve lands; and
- Responding to violations occurring in the NAR.
- Looking after the health and safety of visitors, including hikers. Although lacking the statutory authority to require hikers to register at the Visitor Information Station all visitors are asked to voluntarily register.

Design Review Process

The process prescribed in the 2000 Master Plan for review of new development in the science reserve has yet to be fully tested for a major project. As the process has recently been employed, we have the opportunity to assess its efficacy and practicality, and determine whether or not the process should be re-evaluated and/or modified. As with all new endeavors, assessment and evaluation are keys to ensuring success.

Environmental Protection

OMKM, in cooperation with the University of Hawai'i at Hilo, hired an Environmental Safety Technician. This individual will work directly with individual observatories and allow the University to take a more proactive approach to environmental protection and industrial safety issues.

Cultural and Natural Resources Inventory

Cultural

A cultural inventory of the 525-acre astronomy precinct, the area most impacted by human activity, was completed in September 2005.

OMKM and the Mauna Kea observatories are funding a three-year archaeological study that will include inventorying the Science Reserve. Fieldwork is scheduled to begin in Summer 2006.

Natural Resources

Because of the federal status of the wēkiu bug, this species has been given highest priority for studies and monitoring. Surveys of the wēkiu bug were initiated in Spring 2002 and are ongoing. These surveys are helping to assess the range of its habitat. New information has revealed the bug's range extends outside the astronomy precinct.

Beginning in August 2005 OMKM and the Mauna Kea observatories initiated a four-year study of the wēkiu bug's life history, habits and DNA analysis.

Conclusion

The University finds that the Auditor's report as a whole fairly represents both the successes and the shortcomings in the University's effort to improve its management of the Mauna Kea Science Reserve and to implement the recommendations contained in the Auditor's 1998 report. The University continues to make progress and will again approach the state Legislature to obtain the rule-making authority it needs to more completely fulfill its duties and obligations as stewards of this most treasured natural, cultural and educational resource.

Finally, while the University realizes that this audit was conducted according to generally accepted government auditing standards, such standards by their nature cannot account for cultural considerations that are particularly prevalent in Hawai'i. It is difficult to explain or to quantify the importance of interpersonal communications and cultural considerations on the progress and implementation of project review and decision-making processes in our Island community.

The University submits that the most valuable and telling documents are the names of community leaders who have courageously stepped forward in the face of controversy to serve key roles in the process. The Legislature needs to stop and look at the names of those who have voluntarily contributed their time and expertise as members of the Mauna Kea (Master Plan) Advisory Committee, Ahahui Kū Mauna, Kahu Kū Mauna, Mauna Kea Management Board and functional committees of the MKMB to understand how broadly the community is now involved in the management process.

A high level of cynicism and suspicion greeted the University, the IfA, UH Hilo, OMKM, MKMB and Kahu Kū Mauna as they collectively began the process of implementing the Master Plan in late 2000. It takes time to allow for dedicated and passionate people with different backgrounds and conflicting interests to trust and respect each other enough to discuss their differences and explore solutions in a constructive manner. The University submits that while it may never be able to please everyone, the greatest progress made since the year 2000 is in kindling trust and constructive dialogue and initiating a significant cultural shift in how Mauna Kea is perceived and how it is treated.